



Patent
Docket No. 070702006420

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Selena CHAN et al.

Serial No.: 10/667,004

Filing Date: September 19, 2003

For: CONTROLLED ALIGNMENT OF
NANOBARCODES ENCODING
SPECIFIC INFORMATION FOR
SCANNING PROBE MICROSCOPY
(SPM) READING

Examiner: F. W. M. Lu

Group Art Unit: 1634

**SUPPLEMENTAL INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

MS RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO/SB/08a/b. Copies of the foreign documents and non-patent literature documents were previously submitted in an Information Disclosure Statement and/or Office Action, directed to the related application Serial Number 10/251,152, filed September 20, 2002, and, accordingly, copies are not included herewith. This protocol conforms with 37 C.F.R. §1.98(d) and M.P.E.P. 609(A)(2). The Examiner is requested to make these documents of record in the application.

This Supplemental Information Disclosure Statement is submitted with the filing of a Request for Continued Examination under § 1.114; accordingly, no fee or separate requirements are required.

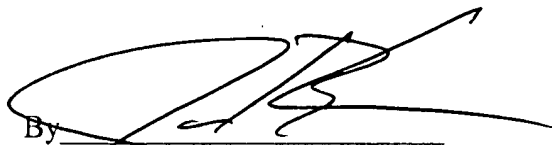
Applicants would appreciate the Examiner initialing and returning the Form PTO/SB/08a/b, indicating that the information has been considered and made of record herein.

The information contained in this Supplemental Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petition and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing attorney docket no. **070702006420**.

Dated: January 30, 2007

Respectfully submitted,



By Jonathan Bockman

Registration No.: 45,640
MORRISON & FOERSTER LLP
1650 Tysons Blvd, Suite 300
McLean, Virginia 22102
(703) 760-7769



ALTERNATIVE TO PTO/SB/08a/b (07-05)

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/667,004	
			Filing Date	September 19, 2003	
			First Named Inventor	Selena CHAN	
			Art Unit	1634	
			Examiner Name	F. W. M. Lu	
Sheet	1	of	3	Attorney Docket Number	070702006420

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1.	4,683,195	07-1987	MULLIS	
	2.	4,683,202	07-1987	MULLIS	
	3.	4,800,159	01-1989	MULLIS	
	4.	5,401,511	03-1995	MARGALIT	
	5.	5,405,766	04-1995	KALLURY	
	6.	5,451,505	09-1995	DOLLINGER	
	7.	5,472,881	12-1995	BEEBE	
	8.	5,603,872	02-1997	MARGALIT	
	9.	5,610,287	03-1997	NIKIFOROV	
	10.	5,620,854	04-1997	HOLZRICHTER ET AL.	
	11.	5,776,674	07-1998	ULMER	
	12.	5,840,862	11-1998	BENSIMON et al.	
	13.	5,986,076	11-1999	ROTHSCHILD	
	14.	6,013,456	01-2000	KHAVAN-TAFTI	
	15.	6,054,327	04-2000	BENSIMON et al.	
	16.	6,187,823	02-2001	HADDON	
	17.	6,225,055	05-2001	BENSIMON et al.	
	18.	6,225,068	05-2001	WOLFRUM	
	19.	6,248,537	06-2001	BENSIMON	
	20.	6,258,401	07-2001	CROWLEY	
	21.	6,265,153	07-2001	BENSIMON et al.	
	22.	6,280,939	08-2001	ALLEN	
	23.	6,283,812	09-2001	JIN	
	24.	6,297,592	10-2001	GOREN	
	25.	6,303,094	10-2001	KUSUNOKI	
	26.	6,303,296	10-2001	BENSIMON et al.	
	27.	6,319,670	11-2001	SIGAL et al.	
	28.	6,344,319	02-2002	BENSIMON et al.	
	29.	6,358,375	03-2002	SCHWOB	
	30.	2003/014289	08-2003	SUNDARARAJAN et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	31.	WO 92/15709	09-1992	ABBOTT LABORATORIES		
	32.	WO 98/04740	02-1998	NANOSPHERE LLC		
	33.	WO 00/29617	05-2000	ADVANCED RESEARCH AND TECHNOLOGY INSTITUTE, INC.		
	34.	WO 00/68692	11-2000	QUANTUM DOT CORPORATION		
	35.	WO 01/25002	04-2001	SURROMED, INC.		
	36.	WO 02/32404	04-2002	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

va- 189419

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/667,004
				Filing Date	September 19, 2003
				First Named Inventor	Selena CHAN
				Art Unit	1634
				Examiner Name	F. W. M. Lu
Sheet	2	of	3	Attorney Docket Number	070702006420

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	37.	Adjari, et al. (1991). "Free-floe Electrophoresis with Trapping by a Transverse Inhomogeneous Field," <i>Proc. Natl. Acad. Sci.</i> 88:4468-4471		
	38.	Ando, et al. (2001). "A High-Speed Atomic Force Microscope for Studying Biological Macromolecules," <i>PNAS</i> 98(22):12468-12472		
	39.	Bensimon, et al. (1994). "Alignment and Sensitive Detection of DNA by a Moving Interface," <i>Science</i> 265:2096-2098		
	40.	Bensimon, et al. (1995). "Stretching DNA with a Receding Meniscus: Experiments and Models," <i>Physical Review Letters</i> 74(23):4754-4757		
	41.	Clauss, et al. (1998). "Atomic resolution STM Imaging of a twisted Single-Wall Carbon Nanotube," <i>Physical Review B</i> 58(8):4266-4269		
	42.	Clauss, et al. (1999). "Electron Backscattering on Single-Wall Carbon Nanotubes Observed by Scanning Tunneling Microscopy," <i>Europhys Lett.</i> 47(5):601-607		
	43.	Freitag, et al. (2000). "Local Electronic Properties of a Single-Wall nanotube circuits Measured by Conducting-Tip AFM," <i>Physical Review B</i> 62(4):2307-2310		
	44.	Frisbie, et al. (1994). "Functional Group Imaging by Chemical Force Microscopy," <i>Science</i> 263:2071-2074		
	45.	Gerdes et al. (1999). "Combing a Carbon Nanotube on a Flat Metal-Insulator-Metal Nanojunction," <i>Europhys Lett.</i> 48(3):292-298		
	46.	Herrick et al. (2000). "Quantifying Single Genre Copy Number by Measuring Fluorescent Probe Lengths on Combed Genomic DNA," <i>PNAS</i> 97(1):222-227		
	47.	Hirahara et al. (2000). "One-Dimensional Metallofullerene Crystal Generated Inside Single-Walled Carbon Nanotubes," <i>Physical Review Letters</i> 85(25):5384-5387		
	48.	Hu et al. (1996). "Imaging of Single Extended DNA Molecules on Flate (Aminopropyl)triethoxysilane Mica by Atomic Force Microscopy," <i>Langmuir</i> 12(7):1697-1700		
	49.	Huang et al. (2001) "Directed Assembly of One-Dimensional Nanostructures into Functional Networks," <i>Science</i> 291:630-633		
	50.	Kaczorowski et al. (1996) "Co-Operativity of Hexamer Litigation," <i>Gene</i> 179:189-193		
	51.	Kim et al. (1998). "AFM Study of Surface Phenomena Based on C ₆₀ Film Growth," <i>Applied Surface Science</i> 130-132:602-609		
	52.	Klien et al. (2001). "Ordered Stretching of Single Molecules of Deoxyribose Nucleic Acid Between Microfabricated Polystyrene Lines," <i>Applied Physics Letters</i> 78(16):2396-2398		
	53.	Kobayashi et al. (2000). "Imaging of Fullerene Molecules on Si(111)-7 7 Surface with NC-AFM," <i>Applied Surface Science</i> 157:228-232		
	54.	Kotler et al. (1993). "DNA Sequencing: Modular Primers Assembled from a Library of Hexamers or Pentamers," <i>Proc. Natl. Acad. Sci.</i> 90:4241-4245		
	55.	Liu et al. (1998). "Fullerene Pipes," <i>Science</i> 280:1253-1256		
	56.	Michalet et al. (1997). "Dynamic Molecular Combing: Stretching the Whole Human Genome for High-Resolution Studies," <i>Science</i> 277:1518-1523		
	57.	Nicewarmer-Pena (2001). "Submicrometer Metallic Barcodes," <i>Science</i> 294:137-141		
	58.	Odom et al. (2002). "Single-Walled Carbon Nanotubes," <i>Ann. N.Y. Acad. Sci.</i> 960:203-215		
	59.	Ondarcuhu et al. (2000). "Parallel Fabrication and electrical Characterisation of Carbon		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/667,004	
			Filing Date	September 19, 2003	
			First Named Inventor	Selena CHAN	
			Art Unit	1634	
			Examiner Name	F. W. M. Lu	
Sheet	3	of	3	Attorney Docket Number	070702006420

		Nanotube Hybrid Molecular Devices," 2 pages.	
60.		Shoenfeld et al. (1996). "Formation Si Quantum Dots in Nanocrystalline Silicon," <i>Solid-State Electronics</i> 40(1-8):605-608	
61.		Uchihashi et al. "Application of Noncontact-mode Atomic Force Microscopy to Molecular Imaging," located at < http://www.foresight.org/Conferences/MNT7/Abstracts/Uchihashi/ > visited on July 3, 2002. (2 pages).	
62.		Wildöer et al. (1998) "Electronic Structure of Atomically Resolved Carbon Nanotubes," <i>Nature</i> 391:59-62	
63.		Woolley et al. (2000). "Direct Haplotyping of Kilobase-Size DNA Using Carbon Nanotube Probes," <i>Nature Biotechnology</i> , 18:760-763	
64.		Li, "Biological Application of AFM," located at < http://www.chembio.uoguelph.ca/educmat/chm/729afm/applicat.htm > visited on July 12, 2002. (2 pages).	
65.		"Carbon Nanotubes," < http://www.1rsm.upenn.edu/nanophysics/nanotubes.html > visited July 2, 2002. (2 pages).	
66.		Fischer et al. "Carbon Nanotube-Derived Materials," located at < http://www.1rsm.upenn.edu/1rsm/IRG_2.pdf > visited July 12, 2002. (pages 32-41)	
67.		Venema et al. "Imaging Electron Wave Functions of Quantized Energy Levels in Carbon Nanotubes," <i>Los Alamos Physics Preprints:condmat/9811317</i> 23	
68.		Boutorine, A. (1995). "Fullerene-Oligionucleotide Conjugates: Photo-Induced Sequece-Specific DNA Cleavage," <i>Angewandte Chemie</i> . 33(23/24):2462-2465	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional); ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--